Remarks

Applicant's attorney acknowledges with appreciation the interview of the subject application with Examiner Verbitsky on July 11, 2005. The principle references were discussed with the Examiner. No formal agreement was reached during the interview. However, the Examiner suggested certain amendments which she believed could place the application in a condition for allowance.

The claims now have been amended to more clearly define the details of the inventive structure. Essentially, the claims were rejected under 35 USC 103(a) as being unpatentable over Kaufman in view Nimberger et al. and Deak et al.

As discussed with the Examiner, even the combination of references does not disclose or suggest the details of the present invention. Each of the references is discussed in turn below.

Kaufman discloses a thermocouple drive assembly utilizing a pair of pinch rollers to move a thermocouple which is disclosed as having a diameter of approximately 1/16" into and out of a hydrocarbon reactor with the amount of movement being on the order of 15 to 60 inches. The thermocouple well 12, which ~~could~~ might be argued is the carrier in this structure, is fixed in position and does not move. There are also upper and lower guides 23, 22, respectively, which also are fixed in position. No seal is disclosed to seal the thermocouple 24 to either the upper ~~of~~ or lower guides or the thermocouple well.

Recognizing the deficiency in Kaufman, the Examiner cited to Nimberger et al. to show a seal and specifically referenced Figure 6. Figure 6 discloses a carrier as denoted by the

Examiner as including elements 40D, 63D and 80D. This carrier, like the carrier of Kaufman, is fixed in position and is not moveable, a major distinction between the references cited and the defined invention. The Examiner contends that there is a seal between the carrier and the thermocouple through the threaded engagement apparently between the coupler 30D and the threaded dielectric block 80D. Firstly, there is no need for a seal between the thermocouple and the carrier because there is no flow potential through the carrier assembly since it is sealed from any flow from the pipe to the pipe exterior. Therefore, no seal is needed for the thermocouple 28D. Regardless, there is no seal positioned between the carrier and the thermocouple. Particularly, the threaded engagement is not a seal as was pointed out to the Examiner. Regardless, there is no seal between the thermocouple 28D and the carrier since the threaded engagement between the coupler 30D and the dielectric block 80D does not meet the claimed structural limitations of the seal position. Regardless, additional details of the seal structure and the carrier structure have now been provided in the claims as requested by the Examiner.

The Examiner cited to Deak et al. for the proposition that a flow director was old in the art. Deak et al. do disclose a flow director opening. As with the other two references, Deak et al. has an immovable carrier and is used in a gas turbine and requires flow through the carrier which is contrary to the teaching of the present invention. This was discussed in detail in the last amendment.

In summary, the combination of references does not disclose or suggest the defined seal and its structure with the carrier and the sensor device. Additionally, there is no disclosure in the

three references of having a moveable carrier with a sensor device with the carrier being moveable between extended and retracted positions. The present invention allows for the use of a thermocouple in high pressure pipes. It also provides for an easily replaceable thermocouple and an assembly of a carrier and sensor which is movable between extended and retracted positions. Such construction allows for operation of a pipeline for example, without impediment of instruments projecting into the pipeline and reduces the possibility of risk and damage to the sensor. It is pointed out that Nimberger needs no seal since it is an enclosed structure with no possibility of flow through the carrier from the pipeline to the exterior.

It is submitted that the claims are clearly distinguished over the prior art.

With the amendments to the claims, as discussed above, it is believed that the claims are now in a condition for allowance and formal allowance of said claims is respectfully solicited.

If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding the present amendment, it is respectfully requested that the Examiner please telephone Applicant's undersigned attorney in this regard.

Respectfully submitted,

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Robert J. Lewis

Robert J. Lewis
Reg. No. 27,210
Blackwell Sanders Peper Martin LLP
720 Olive Street, 24th Floor
St. Louis, Missouri 63101
(314) 345-6000

ATTORNEYS FOR APPLICANT